



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/963,472

09/27/2001

Daisuke Okamura

KP-9010

9540

466

7590

01/23/2004

YOUNG & THOMPSON  
745 SOUTH 23RD STREET 2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER

EASHOO, MARK

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/963,472

Applicant(s)

OKAMURA ET AL.

Examiner

Mark Eashoo, Ph.D.

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) n/a.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without written traverse of claim group I, claims 1-9 and 13-16 in the papers filed 27-OCT-2003 is acknowledged.

Claims 10-12 and 17-20 from non-elected claim group II have been canceled by the amendment filed 27-OCT-2003.

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

The information disclosure statements filed 27-SEP-2001 and 22-APR-2002 comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. Accordingly, they have been placed in the application file and the information referred to therein has been considered as to the merits.

### *Specification*

A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because of numerous grammatical errors which makes comprehension by a reader difficult. For example:

- 1.) Page 1, lines 7-8, recites "a method of recycling mold plastic parts". This appears to intend "a method of recycling molded plastic parts". This error occurs throughout the entire specification.
- 2.) Page 1, lines 18-19 recites "Accordingly, they have ever been formed of a composition of thermoplastic resins." This appears to intend "Accordingly, they have always been formed from thermoplastic resins."
- 3.) Page 2, line 1, recites the words "decreasing the cost," which appears to mean the phrase "lower cost".

Art Unit: 1732

4.) Page 2, lines 14-16 recites "Not only such physical defects also chemical substances cause the bad influence on the photographic characteristics." This appears to intend "Not only such physical defects, but also chemical substances also cause the bad influence on the photographic characteristics."

The above list is not a complete list of all the grammatical errors. It is requested that Applicant review the entire specification for other grammatical errors.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and (c).

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 1 recites the phrase "A method of used recycling mold plastic parts" which is indefinite because of unclear grammar. For the purpose of further examination, this phrase has been interpreted as -- A method of recycling used molded plastic parts --.

Throughout claims 1-9 and 13-16 the phrase "used mold plastic parts" is repeated which causes the claims to be indefinite because of unclear grammar. For the purpose of further examination, this phrase has been interpreted as -- used molded plastic parts --.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDeMoere et al. (US Pat. 5,600, 391) in view of Akao (US Pat. 5,851,743).

Regarding claim 1: VanDeMoere et al. teaches the basic claimed process of recycling used and molded consumer products (2:45-50 and 1:35-45), comprising: pulverizing /crushing the used consumer product (11:35-56); using the crushed/pulverized material as a molding material (ie. recycling) (11:35-56); and molding recycled plastic parts (11:35-56).

VanDeMoere et al. does not teach adding carbon black and an antioxidant to a molding material. Nonetheless, Akao teaches adding carbon black and an antioxidant to a molding material (6:2-49 and 16:50-18:25). VanDeMoere et al. and Akao are combinable because they are concerned with a similar technical difficulty, namely, moldings/package for photosensitive products. At the time of invention a person having ordinary skill in the art would have found it obvious to have added carbon black and an antioxidant to a molding material, as taught by Akao, in the process of VanDeMoere et al., since Akao suggests the use of carbon black as a desired pigment and the use of antioxidants for prevention of thermal degradation.

Art Unit: 1732

Regarding claims 4-6: Akao further teaches carbon black particles in the range of 5 - 350 nm (6:2-20) at a concentration of 0.01 - 50%, preferably 0.08 - 3 % for packaging photosensitive materials (6:66-7:15). Akao also teaches antioxidants in the range of 0.001 - 5% (18:10-25). Akao would have been combined with VanDeMoere et al. for the same reasons as set forth above.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDeMoere et al. (US Pat. 5,600, 391) in view of Akao (US Pat. 5,851,743) as applied to claims 1 and 4-6 above, and further in view of Levasseur (US Pat. 4,968,463).

Regarding claim 2-3: VanDeMoere et al. further teaches mixing used material with new/virgin materials (11:35-56).

VanDeMoere et al. does not teach master batching. Nonetheless, Akao teaches master batching of an antioxidant and pigment (examples 1 and 5). At the time of invention a person having ordinary skill in the art would have found it obvious to have used master batching, as taught by Akao, in the process of VanDeMoere et al., since master batching is a widely known technique for making dilute concentrations of additives in molding materials.

VanDeMoere et al. does not teach extruding and pelletizing. Nonetheless, Levasseur extruding and pelletizing (Fig. 1, elements 13 and 14). VanDeMoere et al. and Levasseur are combinable because they are concerned with a similar technical difficulty, namely, recycling molded products. At the time of invention a person having ordinary skill in the art would have found it obvious to have extruded the molding material in to pellets, as taught by Levasseur, in the process of VanDeMoere et al., because Levasseur suggests that pelletizing reduces shipping costs when the molding does not occur near the recycling operation.

Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDeMoere et al. (US Pat. 5,600, 391) in view of Akao (US Pat. 5,851,743).

Regarding claims 7 and 9: VanDeMoere et al. teaches the basic claimed process of recycling used and molded consumer products (2:45-50 and 1:35-45), comprising: pulverizing /crushing the used consumer product (11:35-56); using the crushed/pulverized material as a molding material (ie. recycling) (11:35-56); and molding recycled plastic parts (11:35-56).

VanDeMoere et al. does not teach adding carbon black and an antioxidant to a molding material. Nonetheless, Akao teaches adding carbon black and an antioxidant to a molding material (6:2-49 and 16:50-18:25). VanDeMoere et al. and Akao are combinable

Art Unit: 1732

because they are concerned with a similar technical difficulty, namely, moldings/packaging for photosensitive products. At the time of invention a person having ordinary skill in the art would have found it obvious to have added carbon black and an antioxidant to a molding material, as taught by Akao, in the process of VanDeMoere et al., since Akao suggests the use of carbon black as a desired pigment and the use of antioxidants for prevention of thermal degradation.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over VanDeMoere et al. (US Pat. 5,600, 391) in view of Akao (US Pat. 5,851,743) as applied to claims 7 and 9 above, and further in view of Levasseur (US Pat. 4,968,463).

Regarding claim 8: VanDeMoere et al. does not teach extruding and pelletizing. Nonetheless, Levasseur extrudes and pelletizes (Fig. 1, elements 13 and 14). VanDeMoere et al. and Levasseur are combinable because they are concerned with a similar technical difficulty, namely, recycling molded products. At the time of invention a person having ordinary skill in the art would have found it obvious to have extruded the molding material in to pellets, as taught by Levasseur, in the process of VanDeMoere et al., because Levasseur suggests that pelletizing reduces shipping costs when the molding does not occur near the recycling operation.

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDeMoere et al. (US Pat. 5,600, 391) in view of Akao (US Pat. 5,851,743) and Applicant's admitted prior art (Specification - Background section).

Regarding claims 13: VanDeMoere et al. teaches the basic claimed process of recycling used and molded consumer products (2:45-50 and 1:35-45), comprising: pulverizing /crushing the used consumer product (11:35-56); using the crushed/pulverized material as a molding material (ie. recycling) (11:35-56); and molding recycled plastic parts (11:35-56).

VanDeMoere et al. does not teach adding carbon black and an antioxidant to a molding material. Nonetheless, Akao teaches adding carbon black and an antioxidant to a molding material (6:2-49 and 16:50-18:25). VanDeMoere et al. and Akao are combinable because they are concerned with a similar technical difficulty, namely, moldings/packaging for photosensitive products. At the time of invention a person having ordinary skill in the art would have found it obvious to have added carbon black and an antioxidant to a molding material, as taught by Akao, in the process of VanDeMoere et al., since Akao suggests the use of carbon black as a desired pigment and the use of antioxidants for prevention of thermal degradation.

VanDeMoere et al. does not teach adding rubber-like additives to the molding material. However, Applicants' admitted prior art (specification - background section) teaches adding rubber-like additives to the molding material (ie. polystyrene). At the time of invention a person having ordinary skill in the art would have found it obvious to add rubber-like additives to the molding material, as taught by applicant's admitted prior art, in the process of VanDeMoere et al., and would have been motivated to do so in order to make a more impact resistant product.

Claims 14 -16 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDeMoere et al. (US Pat. 5,600, 39f) in view of Akao (US Pat. 5,851,743) and Applicant's admitted prior art (Specification - Background section), as applied to claim 13 above, and further in view of Levasseur (US Pat. 4,968,463).

Regarding claims 14-15: VanDeMoere et al. does not teach extruding and pelletizing. Nonetheless, Levasseur extruding and pelletizing (Fig. 1, elements 13 and 14). VanDeMoere et al. and Levasseur are combinable because they are concerned with a similar technical difficulty, namely, recycling molded products. At the time of invention a person having ordinary skill in the art would have found it obvious to have extruded the molding material in to pellets, as taught by Levasseur, in the process of VanDeMoere et al., because Levasseur suggests that pelletizing reduces shipping costs when the molding does not occur near the recycling operation.

Regarding claim 16: Akao further teaches carbon black particles in the range of 5 - 350 nm (6:2-20). Akao would have been combined with VanDeMoere et al. for the same reasons as set forth above.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walsh et al., Laughner et al., Lieberman, Rossiter et al., and Nichols et al. all teach the basic state of the art.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.



Application/Control Number: 09/963,472

Page 8

Art Unit: 1732

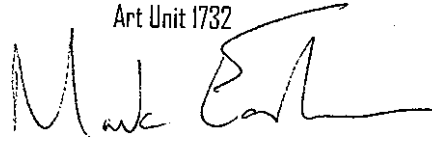
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaanni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Mark Eashoo, Ph.D.

Primary Examiner

Art Unit 1732

  
11/12/04

me  
1/12/04